

Exhibit 3

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Page 1

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION
ORACLE AMERICA, INC.,
Plaintiff,
vs. Case No. 3:10-cv-03561-WHA
GOOGLE, INC.,
Defendant.

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PURSUANT TO THE PROTECTIVE ORDER
VIDEO DEPOSITION OF JAMES R. KEARL, Ph.D.
San Francisco, California
Wednesday, March 23, 2016
Volume I

REPORTED BY:
REBECCA L. ROMANO, RPR, CSR No. 12546

Job No. CS2276036

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<p style="text-align: right;">Page 102</p> <p>1 THE DEPONENT: I'm not sure I understand 2 the difference between that question and the 3 question you just asked. So... 4 Q. (By Mr. Ragland) I think the prior 5 question asked about miscellaneous apps. 6 And now I'm asking about not just the 7 miscellaneous bucket of apps, like for the skier 8 who doesn't want to be in an avalanche, but 9 generally apps, 100,000 versus 400,000 versus a 10 number of apps. 11 And maybe it's the same answer as the 12 prior question, and it's the same -- 13 A. It is -- it is the same answer. And -- 14 Q. If I could turn you, please, to -- 15 A. Let me -- let me be clear, though, that 16 what my report does, I think, responsive to 17 Judge Alsup's order -- order -- Judge Alsup's order 18 is to say the jury will have before it disputed 19 facts. 20 If it comes down on the facts in this 21 way, here's a way to think about the damages that 22 follow. 23 So I haven't spent a lot of time looking 24 for facts. I'm not trying to advocate a particular 25 position here, although I have criticized some</p>	<p style="text-align: right;">Page 104</p> <p>1 million times has greater weight in the analysis 2 than an app that's downloaded five times. 3 Q. And how is that different to your 4 understanding from what Dr. Leonard has done? 5 MR. COOPER: Object to form. 6 THE DEPONENT: I'm just characterizing 7 what Dr. Leonard has done, I think. I'm not doing 8 something different than Dr. Leonard has done. I'm 9 just trying to explain what I think he believes the 10 Kim model to be. 11 I mean, there is this issue here that's a 12 little unusual. 13 Had Dr. Leonard put forward a regression 14 in his analysis that looked like the Kim model -- 15 whereas, he took discrete choice analysis, he took 16 the very transformation, he estimated a model -- we 17 would have said, give us the data and let us test. 18 I mean, it's a sensible thing to do. And 19 Dr. Leonard is a fine econometrician, so there 20 wouldn't be disputes about whether it was refereed 21 or not refereed, at least in my view. That 22 wasn't -- that -- that wouldn't be where you would 23 put economic weight on this. 24 You would say, Let me see the data and 25 let me test whether or not the parameter estimates</p>
<p style="text-align: right;">Page 103</p> <p>1 positions as inconsistent, I think, with basic 2 economic sense. 3 But -- so whether I am or not aware of 4 that, if the jury has that evidence or evidence 5 that would lead them to understand and agree that 6 that mattered, then my report, again responsive to 7 Judge Alsup's direction, is to say, okay, here's 8 how to think about damages in that case. 9 Q. In paragraph 65 of your report, which is 10 on pages 34 and 35 of Exhibit 1580, you say that, 11 "The way the Kim model works is that platform 12 market shares are a function of the weighted 13 availability of apps on that platform with the 14 weights determined by the popularity of the app." 15 Why -- my question is maybe very 16 simplistic. But why do you believe that the Kim 17 model works in that way? 18 A. If -- if you look under the hood of -- of 19 the way that Dr. Leonard sort of programs it, and 20 you also look at the more summary data and 21 discussion in Kim's chapter, the apps are weighted 22 as they enter into the various components of the 23 model. And they are weighted by, more or less, 24 downloads -- download shares. 25 So that an app that's downloaded a</p>	<p style="text-align: right;">Page 105</p> <p>1 that you think are important are sensitive to the 2 data, to the way the data is created, to the time, 3 and so on. 4 We have none of that. Okay. It's 5 literally impossible to test whether the parameters 6 that come out of the Kim model that Leonard relies 7 upon are sensitive to anything. 8 We don't know the data. We didn't even 9 know all of the Kim model parameters. 10 Surprisingly, one of the key parameters he has to 11 get by email from -- from Kim. 12 So there's a -- a bit of a disadvantage 13 here. 14 And all I can do is to do what he's done, 15 is to say, okay, here's what the Kim model does, 16 and -- and here's how Leonard has programmed in 17 GAUSS in order to implement his market share 18 adjustments of the Kim model. 19 I can do that. I can -- I have 20 replicated what -- what -- what he did. 21 And then said, okay, let's go a step 22 further and -- and relax some of the assumptions 23 that are in his paper about the two parameters and 24 about the things that would be or not be available 25 in the but-for world, and, if tested, the</p>

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<p style="text-align: right;">Page 106</p> <p>1 sensitivity of his conclusions to his use of those 2 parameters. 3 But what you can't do, but would like to 4 do is to test the -- test the underlying 5 sensitivity of the parameters to the data and the 6 way it was -- the structure of the model. 7 Q. (By Mr. Ragland) In your Scenario No. 3, 8 under your Alternative No. 4 -- 9 A. Is this page -- 10 Q. Well, it -- it is referred to on page 36 11 of your report. And I will direct you to 12 particular paragraphs. 13 But just as sort of the foundation then, 14 you removed apps from the counterfactual as 15 compared to Dr. Leonard's analysis for that 16 scenario; is that correct? 17 A. Yes. But I'm limited to the universe of 18 apps that are in his original analysis. 19 Q. And so in paragraph 70 here, on page 36, 20 you explain that in Scenario 3, "I removed 21 dual-home criteria from Scenario 2. This resulted 22 in only 10 percent of the apps remaining in the 23 model. 24 "In this scenario there would be an 25 approximate 20 percent loss of Android users, an</p>	<p style="text-align: right;">Page 108</p> <p>1 been marked as Exhibit 1584. 2 A. So the first line in that exhibit is the 3 number of apps that Dr. Leonard -- unique apps that 4 Dr. Leonard has in each year, and the total number 5 of unique apps in his base model, which is 2,687, 6 over the four years. 7 Okay. And then you can see the numbers 8 when you change to Scenario 1. Scenario 1, you 9 lose two apps. You'll lose one in 2013 and 2014, 10 but only one of them is unique, so you only lose 11 one unique app. 12 Scenario 2, you go down to 1814, and you 13 can see the year-by-year. 14 And Scenario 3, you go down to 344. 15 Okay. 16 Q. So for Scenario 3 then, you removed 17 approximately 2300 and -- 18 A. Yeah, 20 -- I think I said 20 percent. 19 But this is not misleading, but this 20 doesn't quite tell you the story. Because those 3, 21 4 -- 144 apps on -- on a download-weighted basis 22 constitute about 40 percent. 23 So -- so I think Dr. Leonard's 24 counterfactual reduces about 2 percent. And my -- 25 on my Scenario 3 counterfactual then goes from</p>
<p style="text-align: right;">Page 107</p> <p>1 estimate of damages of more than 3.5 billion." 2 So how many additional apps do you draw 3 from the counterfactual as compared to 4 Dr. Leonard's analysis for this Scenario 3? 5 A. It may be in the exhibits, so... 6 (Exhibit 1584 was marked for identification by 7 the court reporter and is attached hereto.) 8 Q. (By Mr. Ragland) So, Dr. Leonard, you -- 9 sorry -- Dr. Kearl, you have been handed what's 10 been marked as 1584. These are the exhibits to 11 your report, which was marked as 1580? 12 A. Yes. 13 Q. Okay. So with those in front of you, 14 then I can repeat the question I had. 15 Say so in paragraph 70 on page 36 of your 16 report, you explain that, "In Scenario 3, I removed 17 the dual-home criteria from Scenario 2. This 18 resulted in only 10 percent of the apps remaining 19 in the model." 20 And my question is, how many additional 21 apps did you draw from the counterfactual as 22 compared to Dr. Leonard's analysis? 23 A. So if you turn to 24 Exhibit 4.A.1(Corrected). 25 Q. And, for the record, that's within what's</p>	<p style="text-align: right;">Page 109</p> <p>1 98 percent to 40 percent. 2 And -- and it's that that feeds into the 3 model, not the number of apps. It's the number of 4 apps... 5 Q. In Scenario 3, does this set of 6 additional apps that you draw from the 7 counterfactual include the Facebook app? 8 A. I don't think so. I think the Facebook 9 app is probably in the 344 that's there, because 10 it's the most downloaded app. But -- but I don't 11 know. I mean, I -- the -- I'm trying to think 12 whether or not we could figure it out. 13 I -- I don't remember, as I sit here, 14 whether or not Dr. Leonard has app by name or just 15 app by download weight. So I don't know the answer 16 to that question. 17 Q. And is the -- the same response that you 18 don't know, sitting here today, whether or not the 19 apps dropped from Scenario 3 in the counterfactual 20 includes the Skype app? 21 A. Again, I don't know. I would have to go 22 see whether or not the apps are identified by name. 23 I just don't recall. 24 Q. What was your basis for removing the 25 particular apps that you did from the</p>

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<p style="text-align: right;">Page 114</p> <p>1 excluded all or in part, all right, and the Kim 2 analysis that Dr. Leonard has relied upon. 3 The Kim analysis is subject to two 4 criticisms. 5 One is it focuses on the wrong question. 6 It focuses on the winning apps, and not sort of the 7 important, but not in the top -- top 100 or 200 or 8 1,000. All right. 9 But if -- if you throw out both Shugan 10 and the Kim model, then the experts on the -- on 11 the two sides here have nothing to say about the 12 important question, about what -- what would be the 13 quantitative amount of damages in the intermediate 14 case, in which the jury concluded that it wasn't an 15 all-or-nothing deal, but it was somewhere in 16 between. 17 Q. Did you consider, in preparing your 18 report, the popularity of different programming 19 languages at the time that Android was developed? 20 A. No. I am not a fact witness. You keep 21 asking me today. I will pass. 22 Q. And -- and -- and I'll just -- I'll just, 23 you know, say generally, I'm not trying to be 24 sinister or tricky here, or anything like that. I 25 just want to make sure that I understand the record</p>	<p style="text-align: right;">Page 116</p> <p>1 categories of programmers face. 2 Q. Is it fair to say that you're spending 3 more time than you want to at lawyers' services? 4 A. Absolutely. 5 MR. COOPER: Yes. 6 Q. (By Mr. Ragland) Well, I should have 7 asked a foundational question. 8 What -- what do you mean by multi-homing? 9 A. Multi-homing, I think, means that I write 10 for several platforms that presumably have 11 different implementing -- well, different 12 app-support platforms. 13 That is, you've got -- this is awkwardly 14 put. You've got to write in different languages. 15 Okay. 16 Q. In your report, on paragraph 59, which is 17 on -- you can race to get to the page -- pages 30 18 and 31, you state in there that, "Google makes less 19 search-related profit when users switch from an 20 Android phone to another smartphone." 21 What is -- to your recollection, 22 what's the -- the evidence or basis for that -- for 23 that statement? 24 A. This has a long predicate to it, which I 25 describe in my -- in my -- early on in the report,</p>
<p style="text-align: right;">Page 115</p> <p>1 properly. And so -- 2 A. As long as I can -- 3 Q. I mean no disrespect, or anything like 4 that. 5 A. No, no, no, no, I didn't mean that. But 6 as long as I can continue to answer I'm not a fact 7 witness, that's fine. 8 Q. Absolutely. Absolutely. 9 Would you agree that from an economics 10 perspective, developers have strong incentives to 11 multi-home? 12 A. I don't know the answer to that question. 13 I don't think it's self-evident that they have a 14 strong incentive to multi-home. 15 Q. Okay. 16 A. I really -- you're spending more time 17 with an economist than you want to today. But an 18 economist -- an economist's response is always 19 going to be -- to say that depends upon the cost. 20 Right. 21 And if multi-homing costs me a lot, then 22 I'm going to be satisfied with a single platform. 23 So I don't think there's a single uniform 24 answer to that question absent of knowing about the 25 costs that different programmers face or different</p>	<p style="text-align: right;">Page 117</p> <p>1 which is, you would think that the nature of 2 traffic acquisition costs would be sort of almost 3 stipulated, that everybody would agree that the 4 record would be clear on this matter, that we would 5 know who pays what and how much. 6 And the record is a hash. It's not 7 clear. And the experts aren't clear either. 8 Because I asked them this question when I had an 9 opportunity to pose questions in depositions. 10 So it -- with that as background, it's my 11 understanding that when Google sells an ad, its 12 revenue doesn't depend upon which -- it's -- the 13 price it gets paid for placing the ad doesn't 14 depend upon which platform it's on. 15 So its revenue are platform neutral, but 16 that its costs are not. And that the advantage of 17 Android is that it reduced traffic acquisition 18 costs. 19 That's what I believe the facts will be, 20 but they're not clear. Okay. 21 I think there's some indirect evidence 22 that that's what Google wanted. It wanted to 23 reduce traffic acquisition costs. 24 That may have occurred in two ways. Only 25 one way is handled by all of the experts in this</p>